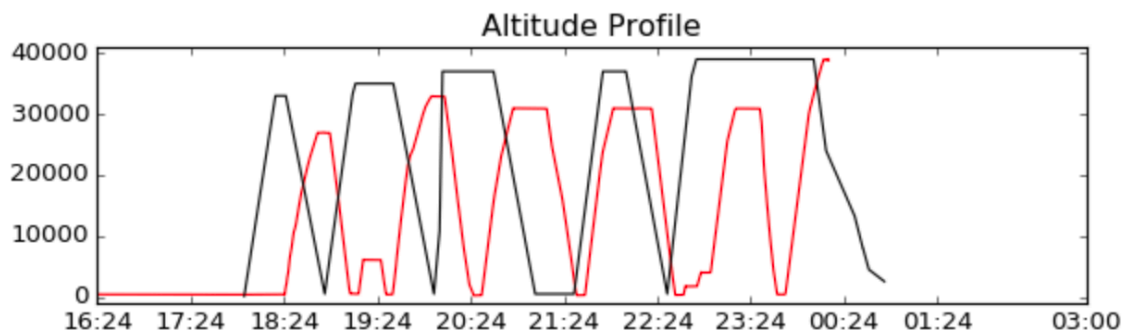
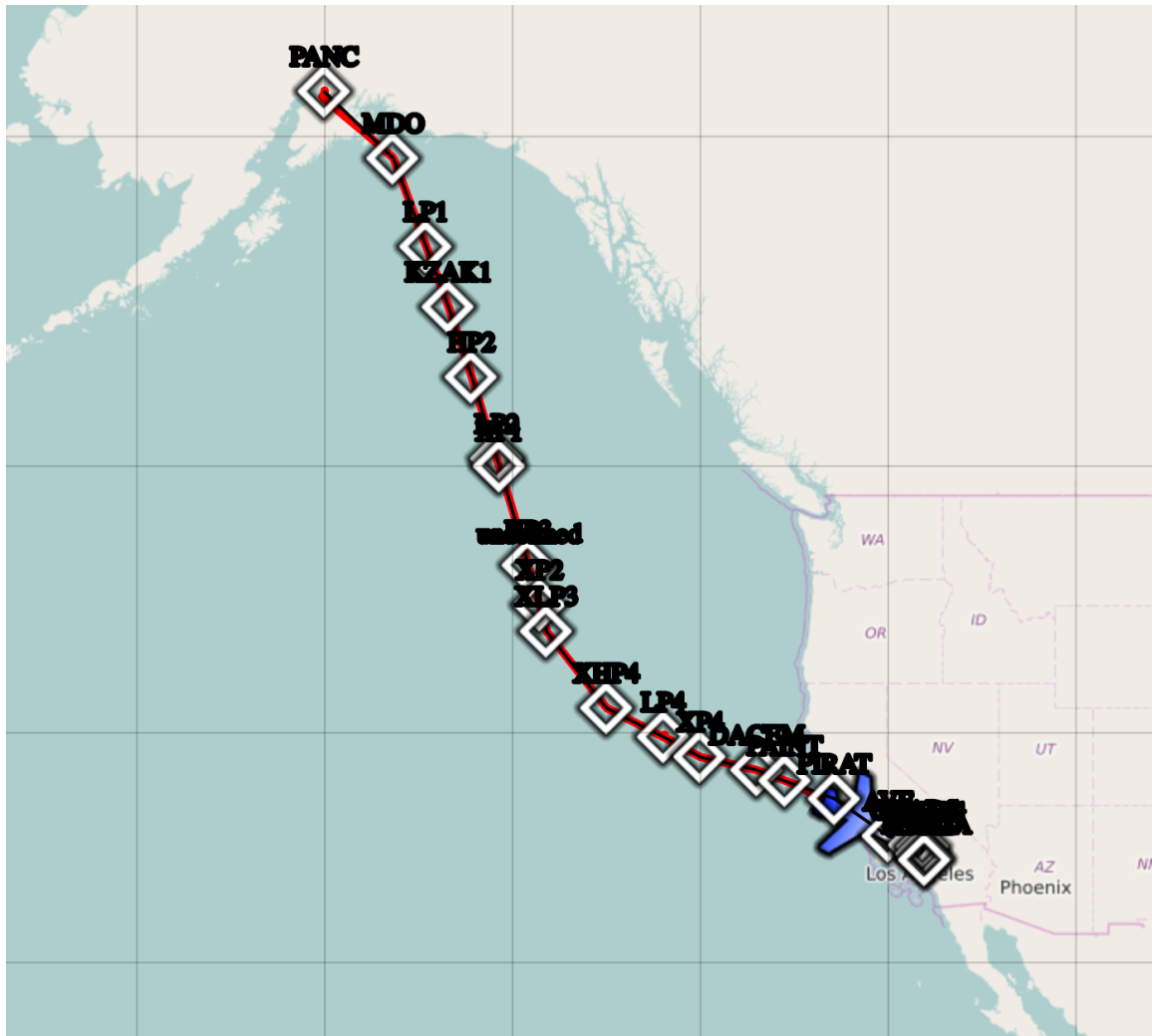


## PANC-KPMD

1:20 delayed takeoff: 10:18 LT (18:18 UT)

- Late departure from Anchorage after extended power issues – transfer to aircraft power was problem. Zenith CAFS was not able to be repaired. Panther had higher baselines first hour.
- Climb to FL270. Mix of black carbon / CO and lower strat air. 110 ppb ozone / 0.7 ppb NOy. Level at FL270 for 5 min.
- *Profile 1.* North side of front. Cloud deck at 3600ft. Cloud base 2500ft. Level at 500ft. On ascent, held at 6kft for a long time. Opted to do another boundary layer profile. Finally cleared to FL330. Some pollution on ascent. FL330 in cirrus.
- *Profile 2.* South side of front. 500 ft is in cloud. Wind speeds <10knots.
- Climb to FL310.
- *Profile 3.* Descent to 500ft at our Southwestern point. Very calm seas – 3.5 m/s windspeed. Clear here. High ozone / low CO / low N<sub>2</sub>O / low H<sub>2</sub>O on descent and climb out (near 6kf). Perhaps a bit of the high PV air forecast for this region.
- Climb to FL310.
- *Profile 4.* See similar high PV air (+30 ppb ozone -1 ppb N<sub>2</sub>O) just above the mixed layer. Doing 500, 2000, and 4000 ft. 5-6 m/s wind speed in mixed layer. The 4000' leg is in the high PV air (70 ppb ozone).
- Climb to FL310.
- *Profile 5 (last of ATom III).* High PV air very thin – just above the mixed layer (stratus cloud). Wind speed 12 m/s.
- Climb to FL390.
- Descent into Palmdale. And ..... it's a wrap!





## Debrief

CAFS – Only nadir spectrometer works.

NO<sub>y</sub>/O<sub>3</sub> – good.

DLH- good.

Picarro good.

QCLS good flight.

SAGA good.

Panther/PFP/UCATs. good.

AO2/Medusa. good.

GT-CIMS good.

NOAA CIMS good.

WAS good.

MMS good.

TOGA – great.

AMP- good. lost 5 min of data due to computer.

CAPS good. some fogging issues at beginning.

PALMS. Good – did some inlet diagnostics with new flow controller.  
ATHOS. good.  
ISAF. good.  
SP2 – good.  
HRAMS. good.  
CITCIMS. good.

Great last flight for ATom III. Camera Credit: Max Dollner

